SUPERFUND PRELIMINARY SITE CLOSE OUT REPORT
LASKIN/POPLAR OIL COMPANY SITE
JEFFERSON, OHIO

I. SUMMARY OF SITE CONDITIONS

Background

The Laskin/Poplar Oil Company site is located at 717 North Poplar Street in Jefferson, Ohio. The nine-acre site is bounded on the north by Cemetery Creek, on the south by Ashtabula County Fairgrounds, to the east by Poplar Street, and to the west by softball fields and a wooded ravine belonging to the County of Ashtabula.

Prior to implementation of the remedial action, the site contained the former residence of the owner of the property, a greenhouse complex, a boiler house containing 4 boilers formerly used to heat the greenhouses, a smokestack, 4 in-ground oil storage pits, 4 underground and 32 aboveground tanks, a retention pond, two drained ponds, a fresh water pond, and miscellaneous buildings and sheds.

The site has housed greenhouses since the early 1890's. In the 1950's, boilers were installed to heat the greenhouses. Storage pits and tanks were installed during the 1960's to store the oil that fired the boilers. The Poplar Oil Company continued to accept waste oil from hundreds of sources in northern Ohio and western Pennsylvania throughout the 1960's and 1970's. The company resold some of the waste oil and used additional waste oil to treat gravel and dirt roads in 17 townships of Ashtabula County. In 1977, the United States Environmental Protection (U.S. EPA) and Ohio Environmental Protection Agency (OEPA) identified polychlorinated biphenyls (PCBs) in the waste oil. In 1981, a court order stopped activities at the Poplar Oil Company.

In early 1981, the U.S. EPA conducted an investigation at the site which again detected PCBs in the on-site waste oil. In 1981 and 1982, the U.S. EPA performed several removal actions at the site. The emergency actions included the following: two ponds were drained and regraded; surface runoff was diverted to a retention pond to prevent flooding; 302,000 gallons of waste oil were removed and taken to an off-site incinerator; 430,000 gallons of contaminated surface water were treated and discharged off-site; and 205,000 gallons of sludge were solidified on-site.

In 1983 the site was placed on the U.S. EPA's Superfund National Priorities List of uncontrolled hazardous waste sites. Fund-lead Phase I remedial investigation (RI) activities were conducted from December 1983 to November 1984. In response to an Administrative Order issued in August 1984, the potentially responsible parties (PRPs) removed approximately 250,000 gallons of waste oil and wastewater during the following winter.

A second Administrative Order was issued to the PRPs in late 1986, which ordered them to develop a work plan to address the storage pits, tanks, and their contents, and surrounding soils. A U.S. EPA-prepared Focussed Feasibility Study (FS) was completed in August 1987. The Source Removal (SR) Record of Decision (ROD) was issued on September 30, 1987. Phase II RI activities were conducted in the fall and winter of 1987-88. A third Administrative Order was issued in February 1988 for the implementation of the 1987 SR ROD. Meanwhile the Phase II RI Report which contained the results of both the Phase I and II RI investigations was released in December 1988. The Final Remedy (FR) FS was provided for public comment on April 7, 1989. CH2MHill performed the RI and FS for U.S. EPA. A final remedy was selected on June 29, 1989 and documented in the FR ROD.

Remedial Construction Activities

Both the SR and the FR remedial design and remedial action (RD/RA) were performed by the PRP Laskin Site Group under a September 1990 Consent Decree. The SR ROD work to be performed under the 1988 Administrative Order was incorporated into the 1990 Consent Decree. Due to the incineration of different materials set forth in both RODs and the need to prepare the site for RA activities, some FR activities were necessarily performed during the SR.

The SR selected remedy consists of the following major components:

* construction of a fence around the contaminated portions of the site and the mobile on-site incinerator

* on-site incineration of oils, sludges, and highly contaminated soils

* off-site treatment of all wastewater, decontamination water, and scrubber water

* off-site disposal of all incinerator ash

* dismantling and off-site disposal of all tanks

* crushing and incineration of the cinder block walls of the pits

* backfilling and/or grading of all excavated areas to preclude ponding.

In May 1990, U.S. EPA issued an Explanation of Significant Differences (ESD) for the SR, which explained why the Agency had

decided to implement two changes from the SR ROD. Any RCRA-delisted incinerator ash would be left on-site underneath the multi-media cap selected in the final remedy. Additionally, wastewater would be treated on-site through a wastewater treatment system in compliance with protective discharge limits set forth by OEPA.

The major components of the FR consist of the following:

* drain retention and fresh water ponds. Discharge surface water from ponds to Cemetery Creek, with treatment if required. Backfill freshwater pond with clean fill and grade retention pond area.

* thermally treat contaminated soil, ash, and debris from the boiler house area and dispose of ash on-site (if delistable) or off-site in a RCRA landfill

* demolish and thermally treat or decontaminate dioxin-contaminated structures

* construct a groundwater diversion trench up-gradient of the contaminated soil and groundwater

* construct a multi-layer cap over soils in exceedance of a 10^{-6} excess lifetime cancer risk level or Total Hazard Index of 1

* de-water site by natural groundwater flow to Cemetery Creek

* conduct groundwater and surface water monitoring to assess quality of groundwater migrating towards Cemetery Creek

* impose access and use restrictions.

The PRP Laskin Site Group awarded the SR RA contract to USPCI in October 1990. The SR RD was finalized in June 1991 and RA work was formally initiated. U.S. EPA and OEPA conducted a prefinal inspection for the SR on November 19, 1992. At this time remaining materials to be incinerated were identified. The incineration of all source materials was completed on November 25, 1992. The RA Report was approved by U.S. EPA on December 22, 1992 and documented that the following activities occurred:

* construction of a fence around the entire site
* draining the freshwater pond and discharging it to Cemetery Creek
* demolition and disposal of the greenhouses and sheds
* construction of support facilities
* removal of asbestos material from the boiler house

* on-site incineration of potentially dioxin-contaminated soil, ash and debris from the boiler house
* demolition and incineration of the boiler house stack
* demolition and incineration or decontamination of the boiler house structural components and all equipment contained therein, including the four boilers
* dismantling, decontamination, and disposal off-site for recycling of all existing steel tanks
* on-site disposal of above and below ground piping associated with the tanks and pits to a location under the final remedy cap
* on-site incineration of the oils and sludges in the drums, tanks and pits
* on-site incineration of source soil materials around the pits and tanks
* crushing and incineration of the concrete block and concrete and structural components of the pits
* treatment of all wastewaters, contaminated surface water runoff, decontamination water, and incinerator scrubber water
* on-site disposal of all incinerator ash meeting RCRA delisting and land ban criteria
* grading of site in preparation for the final remedy cap.

The PRP Laskin Site Group awarded the FR RA contract to OHM in August 1992. The FR RD was formally approved in March 1992 and RA work was formally initiated. U.S. EPA and OEPA conducted a final inspection on September 20, 1993. No further site activity remains. A letter dated September 21, 1993 from the PRP Laskin Site Group certified that FR RA activities were performed according to design specifications and contractor plans and U.S. EPA and OEPA approved modifications. The groundwater diversion trench has been installed on the east, west and south sides of the site and the multi-media cap has been installed. The site will now experience de-watering by natural groundwater flow to the Cemetery Creek to the north.

II. DEMONSTRATION OF QA/QC FROM CLEANUP ACTIVITIES

U.S. EPA and OEPA closely reviewed the SR and FR RD plans and specifications to ensure compliance with the SR and FR RODs. U.S. EPA and OEPA ensured compliance during the RA with the approved RD plans and specifications and approved field modifications by rigorous oversight of the on-site incineration and cap and trench construction. Such rigorous oversight was achieved by means of constant contractor support and frequent remedial project manager and state site coordinator inspections. In addition, U.S. EPA's contractor conducted quarterly on-site audits of the air monitoring program.

The sample analytical program was conducted in accordance with the approved Quality Assurance Project Plan (QAPP), Sampling and

Monitoring Plan (SMP), and Air Monitoring Plan (AMP). All laboratories utilized were audited by U.S EPA Central Regional Laboratory personnel and found to be acceptable.

The QA/QC program utilized throughout the RA was sufficiently rigorous and was complied with to the extent adequate to enable U.S. EPA to determine that the testing results reported are accurate to the degree needed to assure satisfactory execution of the SR and FR RA consistent with the RDs and RODs.

III. ACTIVITIES AND SCHEDULE FOR SITE COMPLETION

As of September 15, 1993 all RA construction activities are complete. Under the terms of the RD/RA Consent Decree, the PRP Laskin Site Group is responsible for all O&M at the site. The PRP Laskin Site Group has started to produce the Final Inspection, Maintenance and Monitoring Plan (O&M plan) and the FR RA report. Both reports are scheduled for U.S. EPA approval by December 1993. Groundwater and surface water sampling will be initiated according to the schedule in the O&M plan. U.S. EPA will be responsible for reviewing all monitoring data results to evaluate the effectiveness of the cap and diversion trench.

Approval of O&M Plan	December 1993
Approval of FR RA Report	December 1993
First Five-year Review	October 1995

IV. FIVE-YEAR REVIEWS

U.S. EPA will be responsible for performing five-year reviews. A statutory five-year review will be conducted because the remedial actions result in hazardous substances remaining at the site above levels that allow for unlimited use and unrestricted exposure. During the five-year reviews, U.S. EPA will determine whether the site remains protective of human health and the environment.

Wm. E. Muno

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9/23/93
Date